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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

HARRISON, C

ART UNIT	PAPER NUMBER
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2672

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DATE MAILED:

12/20/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/183,621

Applicant(s)

Livesey

Examiner

Chante' Harrison

Group Art Unit

2672

 Responsive to communication(s) filed on Sep 25, 2000. This action is FINAL. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

 Claim(s) _____ is/are allowed. Claim(s) 1-20 is/are rejected. Claim(s) _____ is/are objected to. Claims _____ are subject to restriction or election requirement.**Application Papers** See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The drawing(s) filed on _____ is/are objected to by the Examiner. The proposed drawing correction, filed on _____ is approved disapproved. The specification is objected to by the Examiner. The oath or declaration is objected to by the Examiner.**Priority under 35 U.S.C. § 119** Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). All Some* None of the CERTIFIED copies of the priority documents have been received. received in Application No. (Series Code/Serial Number) _____. received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

 Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).**Attachment(s)** Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No(s). _____ Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152**-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --**

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DETAILED ACTION

1. This action is responsive to communications: Amendment A, filed on 9/25/00.

This action is made FINAL.

2. Claims 1-20 are pending in the case. Claims 1, 8, 15 and 17 are independent claims.

Claims 16-20 have been added. Claims 5 and 12 have been amended.

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-13 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen, U.S. Patent 5,956,043, 9/1999, 345/430.

As per independent claim 1, Jensen discloses receiving texture image data (col. 6, ll. 10-21), covering a target area in an aperiodic tiling pattern (col. 6, ll. 6, ll. 37-46; col. 7, ll. 4-15). It would have been obvious to one of ordinary skill in the art at the time of invention to use the teachings of Jensen because he allows user or program manipulation for the generation and mapping of supertiles.

As per dependent claim 2 and 9, Jensen discloses scanning images into memory (col. 6, ll. 10-18).

As per dependent claims 3, 10 and 18, Jensen discloses selecting an aperiodic tiling pattern (col. 6, ll. 40-46; col. 7, ll. 33-34), generating a set of tiles (col. 6, ll. 37-51), applying the tiles to the target area (FIG. 14; col. 7-8, ll. 55-10).

As per dependent claims 4, 11 and 19, Jensen discloses covering the target area with tiles using the tiling pattern (FIG. 14), and mapping textured tiles to the aperiodic tiles (col. 7-8, ll. 55-10).

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As per dependent claims 5, 12 and 20, Jensen discloses generating a tiling (col. 6, ll. 37-51), the tiling associated with tiles based on the aperiodic tiling pattern (col. 6-7, ll. 59-9), and mapping the textured tiles to the tiling (col. 7, ll 5-9; col. 7-8, ll. 55-10).

As per dependent claims 7 and 13, Jensen discloses using various programs (col. 6, ll. 1-8), but fails to specifically disclose a CAD program. However it would have been obvious to one skilled in the art at the time of invention to use Jensen's disclosure because he discloses using programs to automate tiling generation and mapping.

As per independent claim 8, Jensen discloses instructions (col. 6, ll. 1-8) for performing the method of claim 1. Therefore the rejection as applied to claim 1 is included herein.

As per independent claim 15, Jensen discloses a display (FIG. 10), a target area on the display (col. 7-8, ll. 55-10) and memory (col. 5, ll. 15-30). The rejection as applied to claim 1 is included herein.

As per dependent claim 16, Jensen discloses selecting an aperiodic tiling pattern (col. 6, ll. 40-46, 60-65; col. 7, ll. 4-11, 27-32).

As per independent claim 17, Jensen discloses means (FIG. 10) for implementing the method of claim 1. Therefore the rejection as applied to claim 1 is included herein.

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3. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen as applied to claims 1 and 8 above, and further in view of Deutsch et al., U.S. Patent 5,226,175, 7/1993, 345/419.

As per dependent claim 6 and 14, Deutsch discloses determining a substitution tiling level and using the substitution level to generate the tiling (abstract; col. 6, ll. 20-31), which Jensen fails to disclose. However it would have been obvious to one skilled in the art at the time of invention to combine the disclosures of Deutsch with Jensen because both generate and manipulate supertiles.

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Response to Arguments

4. Applicant's arguments filed 9/25/00 have been fully considered but they are not persuasive.

With respect to independent claims 1, 8 and 15, Examiner interprets Jensen as disclosing aperiodic tiling patterns because he translates and/or rotates a portion of a supertile, allows successive selection of periods, which identifies an aperiodic tile repetition, along either or both of the X and Y axes and modifies the size and orientation of the tile displayed at the selected period (col. 6, ll. 59-65; col. 7, ll. 4-6, 9-11, 27-32).

With respect to dependent claims 3 and 10, Examiner interprets Jensen as selecting an aperiodic tiling pattern through manipulation of the period of repetition along either of two axes and the size and orientation of the tile placed at the selected period.

With respect to dependent claims 4-5 and 11-12, Examiner interprets Jensen as disclosing mapping textured tiles to the aperiodic tiles because he teaches applying computer graphics operations to each tile placed at the selected period.

With respect to dependent claims 6 and 14, Deutsch teaches providing encoded image data, consisting of supertiles and the hierarchical data that defines each supertile, to a display which performs graphic manipulations on the supertiles (col. 5-6, ll. 60-58). Deutsch in combination with Jensen is obvious because Deutsch defines the supertile structure and teaches manipulating the supertile and Jensen teaches selecting a period indicating non-linear points of

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repetition of a supertile along either of two axes and manipulation of the tile displayed at the selected period.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
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or faxed to:

(703) 305-9051, (for formal communications intended for entry)

OR:

(703) 308-6606 (for informal or draft communications, please label
“PROPOSED” or “DRAFT”)

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal
Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner
should be directed to Chante' Harrison whose telephone number is (703) 305-3937. She can
normally be reached on Monday-Friday from 8:00am - 5:00pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor Mike
Razavil, can be reached on (703) 305-4713.

Any inquiry of a general nature or relating to the status of this application should be
directed to the Group receptionist whose telephone number is (703) 305-3900.

Chante' Harrison

December 8, 2000



MATTHEW LUU
PRIMARY EXAMINER